

**A. CLASSIFICATION OF SUBJECT MATTER**  
 INV. 606F17/30

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

 Minimum documentation searched (classification system followed by classification symbols)  
 G06F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, INSPEC

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 548 724 A (AKIZAWA MITSURU [JP] ET AL) 20 August 1996 (1996-08-20) column 2, line 1 - column 3, line 40 column 4, line 10 - column 10, line 33 figures 1-17	1,8,15
Y		2-7, 9-14, 16-20
Y	US 2003/115218 A1 (BOBBITT JARED E [US] ET AL) 19 June 2003 (2003-06-19)  abstract paragraphs [0008], [0009] paragraphs [0037] - [0098] figures 1-13  ----- --/--	2-7, 9-14, 16-20

☒ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

## \* Special categories of cited documents:

- "A" document defining the general state of the art which is not considered to be of particular relevance  
 "E" earlier document but published on or after the international filing date  
 "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)  
 "O" document referring to an oral disclosure, use, exhibition or other means  
 "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention  
 "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone  
 "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.  
 "Z" document member of the same patent family

Date of the actual completion of the international search

9 March 2009

Date of mailing of the international search report

23/06/2009

Name and mailing address of the ISA/

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## C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>ANONYMOUS: "How DFS Works: Remote File Systems" DISTRIBUTED FILE SYSTEM (DFS) TECHNICAL REFERENCE, [Online] 28 March 2003 (2003-03-28), XP002514939 Retrieved from the Internet: URL: <a href="http://technet.microsoft.com/en-us/library/cc782417.aspx">http://technet.microsoft.com/en-us/library/cc782417.aspx</a> [retrieved on 2009-02-13] the whole document</p>	1-20

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US2008/083117

## Box No. II Observations where certain claims were found unsearchable (Continuation of Item 2 of first sheet)

This International search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
  
2. ☐ Claims Nos.:  
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
  
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box No. III Observations where unity of invention is lacking (Continuation of Item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International search report covers allsearchable claims.
  
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of additional fees.
  
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International search report covers only those claims for which fees were paid, specifically claims Nos.:
  
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-20

### Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- ☐ The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- ☐ No protest accompanied the payment of additional search fees.

## FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

## 1. claims: 1-20

Section A (claims 1-20, figures A1-A14, description, page 3, line 29 - page 18, line 27): Load sharing cluster filesystems  
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## 2. claims: 21-38

Section B (claims 21-38, figures B1-B8, description, page 18, line 29 - page 33, line 27): Non-disruptive file migration  
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## 3. claims: 39-53

Section C (claims 39-53, figures C1-C7, description, page 33, line 32 - page 42, line 28): On-demand file virtualization for server configuration management  
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## 4. claims: 54-84

Section D (claims 54-84, figures D1-D2, description, page 42, line 30 - page 52, line 2): file deduplication using storage tiers  
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## 5. claims: 85-114

Section E (claims 85-114, figure E1, description, page 52, line 4 - page 71, line 6): file deduplication using copy-on-write storage tiers  
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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 5548724	A	20-08-1996	NONE
US 2003115218	A1	19-06-2003	US 2006123062 A1
			08-06-2006